

Chapter 5. Special State Concerns and Recommendations

Water resources concerns that are important in New Jersey and recommendations to address these concerns are discussed in the following section of the New Jersey Water Quality Inventory Report. Concerns are grouped by waterbody type and designated use affected. Recommendations include strategies that can be implemented in New Jersey as well as at the regional and national levels.

Rivers and Streams

Special State Concern: Aquatic life designated use impairment

Aquatic life designated uses in freshwater rivers and streams are assessed using populations of bottom dwelling organisms (i.e., benthic macroinvertebrate). Over 800 stations are sampled once every 5 years. (See Part III for additional information.) The second round of sampling has been completed in several water regions and results have been published for the Northwest Region (WMA's 1,2,11). Published results show about 500 of 800 sites (~65%) are moderately impaired and that there is a trend toward moderate impairment over time. These data indicate a lack of progress toward the goal of 50% attainment of aquatic life designated uses by 2005.

Suspected causes of impairment include: Stormwater and runoff from developed land uses such as agricultural and urban containing sediment, nutrients, pesticides and other toxics; adequate stream flow (water consumption, inter-basin transfer of water and wastewater, drought, and flooding); habitat destruction including erosion

Recommended Strategies, in addition to continued implementation of ongoing programs:

- Buffer agricultural stream corridor easements and purchases (CREP);
- Protect and purchase open space for Water Quality and Quantity benefit, linking DWQ and Green Acres
- Encourage additional wastewater reuse and ground water recharge (identify opportunities and remove impediments)
- Encourage additional wastewater reuse and ground water recharge (identify opportunities and remove impediments)
- Develop and implement Municipal Stormwater Permitting and Management Program
- Adopt Water Quality and Watershed Management Rules.
- Develop a composite index to address "fishable" and "swimmable".
- Implement Action plan to address areas of biological impairment
- Develop new and interim milestones for meeting SWQS
- Accelerate the pace of watershed management with additional funds
- Explore development of a new milestone along the lines of "reducing all discharges to streams by 50% by 2003" (clarification needed)
- Develop TMDLs with emphasis on air deposition data

Rivers and Coastal Waters

Special State Concern: Non-attainment of Fish Consumption Designated Use

Much of the data used to establish the fish consumption advisories in New Jersey are over ten years old. Specifically, all PCB/dioxin/pesticide based advisories are from the mid-1980s. Recognizing that this data is old and that the sources of the bioaccumulated contaminants have been subjected to regulatory source reduction over the ensuing years, NJDEP views these advisories as based on *evaluated data* thereby listing the affected waterways uses as “threatened” Fish consumption advisories based on *monitored data* (data collected within the last 10 years) in New Jersey is limited to mercury contamination and NJDEP views these data to establish “not supporting” or “partially supporting” uses. It should be noted however that the primary source of mercury contamination is atmospheric deposition associated with coal fired power plant emissions. Source reduction strategies targeted at these are multi-media in nature. The funding to address these data gaps and routinely update advisories as needed has not been available for several years. A continuous stable source of funding to maintain the State’s monitoring of fish and waterways impacted by consumption advisories should be established.

Recommended Strategies, in addition to continued implementation of ongoing programs:

- Examine effectiveness of current advisory education and outreach effort, and expand or re-focus as necessary.
- Assess air deposition monitoring and modeling results in terms of contribution to food chain, especially commonly-consumed fish species.
- Establish routine state-wide fish tissue monitoring network-contamination, target species and target water bodies
- Based upon available monitoring results, evaluate appropriateness of current fish consumption advisories and need for modifications.

Ocean, Bay, Lake Bathing Beaches and Rivers

Special State Concern: Recreational Designated Use Attainment

Maintaining attainment of recreational designated uses at ocean, bay and lake bathing beaches is critical to New Jersey economy. Diligent management of wastewater treatment plants and associated infrastructure must be coupled with management of nonpoint sources of fecal coliform to continue meeting this goal. Improving sanitary quality of streams which are not designated bathing areas, primarily through management of nonpoint sources, is also needed to make progress toward designated use attainment in rivers. In addition, efforts are underway at the national level to shift from the currently used fecal coliform indicator to enterococcus in saline waters and e.coli in freshwaters.

Recommended Strategies, in addition to implementation of ongoing programs

- Implement beach closing action plan (Atlantic City, Wreck Pond, South Bath Avenue)
- Continue aggressive CSO enforcement for solids and floatables
- Develop and implement a statewide geese management plan with Division of Fish and Wildlife

Estuarine and Ocean Waters

Special State Concern: Shellfish Harvesting Designated Use Attainment

New Jersey is a national leader in opening shellfish beds for harvest and is nearing the state's established milestone of 90% of waters available for shellfish harvest by 2005. This progress can be attributed to proactive upgrades and compliance at the 15 facilities that discharge to the ocean. Continued diligent management of these facilities and control of nonpoint sources will be critical to attainment of this goal and increasing the amount of waters that can be harvested without restriction. In addition, evaluation of toxics in shellfish is also needed.

Recommendations, in addition to continued implementation of ongoing programs:

- Implement shellfish action plan to meet Clean and Plentiful Water milestone of 90% harvestable by 2005
- Many of the strategies used to manage sanitary quality at beaches also apply to shellfish harvest.